

>Is anyone out there automatically decoding time data from WWVB (60 kHz) ?
>I have built the 60 kHz receiver from the articles in 73 magazine earlier
>this year, and have tried to detect the encoded time data.
>Unfortunately, the noise level seems to be much greater than the signal ?
>I was wondering if there was anyone out there that was doing this
>already, and if so, would they care to exchange email messages.
>
>Thank you
>Gary Tennyson
>K04CY
>gary@vulcan.com
>
>Gary Tennyson
>gary@vulcan.com

Gary,
If you listen to WWV or WWVH on the hour or half hour they
give the address for information about all of their stations.
I don't remember it off the top of my head (I should since I
have heard it so much!) All you have to do is write to them
and ask for information about their stations. You will get more than
you will ever need! It is a really nice booklet (50 or so pages)
on all four of their stations (WWV WWVH WWVU WWVB.)

I think the address is:

National Institute of Standards and Technology Time
Radio Station WWV
8000 East County Road 58
Ft. Collins, CO 80524

Kevin

Legal stuff:

The above opinions are my own and not necessarily those of the staff,
faculty, administration, or lab animals (woof!) of The University of
Texas Health Science Center at San Antonio.

Kevin R. Muenzler, WB5RUE
muenzlerk@uthscsa.edu

The University of Texas Health
Science Center at San Antonio,
Department of Computing Resources

*** There is no such thing as a Monkey-Proof Program! ***
*** I can prove it! ***

Date: 7 Jul 1994 15:33 -0600
From: ihnp4.ucsd.edu!swrinde!howland.reston.ans.net!europa.eng.gtefsd.com!
news.uoregon.edu!netnews.nwnet.net!ns1.nodak.edu!news.uoknor.edu!metgem!
cbarrere@network.ucsd.edu
Subject: 403 MHz downconverter
To: ham-homebrew@ucsd.edu

Hello,

I recently purchased some radiosondes (devices which measure temperature, humidity, and pressure and are attached to weather balloons) from an electronics warehouse. These instruments have a transmitter which operates at 403 MHz and transmits a wide-band FM signal. The bandwidth is almost identical to that of a broadcast FM radio. What I am looking to build is a downconverter to bring the 403 MHz signal down to about 87 - 108 MHz. Are there any commercially available products which I could modify to do the job? Any ideas?? Thanks in advance.

Chip Barrere KC5DLP
School of Meteorology
University of Oklahoma
cbarrere@metgem.gcn.uoknor.edu

Date: Thu, 7 Jul 1994 18:01:56 GMT
From: ihnp4.ucsd.edu!sdd.hp.com!news.cs.indiana.edu!noose.ecn.purdue.edu!
constellation.ecn.purdue.edu!wb9omc@network.ucsd.edu
Subject: Camcorder viewer needed.
To: ham-homebrew@ucsd.edu

dalep@crl.com (Dale Lukas Peterson) writes:

>Hello all-

>I am interested in making some "VR" glasses except instead of using small
>computer screens or whatever they are, I would like to use the small
>screen that is looked into when you use a camcorder. Does anybody have
>any idea where I could obtain these? I would appreciate addresses,
>phone#'s, and, prices. Thanx in advance.

Second this. I am working on a small CCD camera system and would like a fairly small viewfinder for them, preferably one that requires 12 volts DC for supply....

Duane
wb9omc@harbor.ecn.purdue.edu

Date: 7 Jul 1994 11:47:27 -0000
From: ihnp4.ucsd.edu!dog.ee.lbl.gov!agate!howland.reston.ans.net!
europa.eng.gtefsd.com!newsxfer.itd.umich.edu!nntp.cs.ubc.ca!torn!uunet.ca!
uunet.ca!ionews.io.org!nobody@network.ucsd.edu
Subject: Frequency conversion - non-linear mode
To: ham-homebrew@ucsd.edu

I'm trying to understand how to operate a transistor in it's 'non linear'
region, as in frequency conversion/mixer circuits.

What kind of measurements, or calculations are required for a basic circuit?

Thanks for any info.

Mike

--

=====
Mike Stramba Email: mike@io.org
Toronto,Canada Internex Online - Toronto, Canada (416) 363-3783
=====

Date: 8 Jul 94 00:54:21 GMT
From: ihnp4.ucsd.edu!library.ucla.edu!europa.eng.gtefsd.com!MathWorks.Com!
news2.near.net!noc.near.net!news.delphi.com!BIX.com!jdow@network.ucsd.edu
Subject: Frequency conversion - non-linear mode
To: ham-homebrew@ucsd.edu

mike@io.org (Mike Stramba) writes:

>I'm trying to understand how to operate a transistor in it's 'non linear'
>region, as in frequency conversion/mixer circuits.

>What kind of measurements, or calculations are required for a basic circuit?

>Thanks for any info.

>Mike

>--

>=====
>Mike Stramba Email: mike@io.org
>Toronto,Canada Internex Online - Toronto, Canada (416) 363-3783
>=====

Well, considering how hard it is to get a transistor, bipolar or FET, to run in a "linear" regime getting mixing action is no problem at all. In fact what you would do is remove *ANY* linearization tricks from the circuit such as an unbypassed emitter or source resistor.

To "predict" performance carefully either measure or estimate the curvature of the transfer function for largish signals. (The LO will clearly be a largish signal, nie?) Then take a Taylor series expansion on it. (Um, if you do not know what that is do a little extra credit reading.) This will give you a constant term plus a linear term plus terms for each "exponent" on the input voltage. For mixer action the interesting term is the squarelaw term. With that you can plug it into $k*(a*\sin(w1*t) + b*\sin(w2*t))^2$. Do your trig on this expression to extract the $\cos((w1+/-w2)*t)$ term (plus or minus depending on which mixer term interests you.) I recommend doing this at least once to get the "feel" for what is happening. (Actually I recommend specifically doing it for an LO signal which is large plus two smaller and equal level terms both on the same side of the LO and fairly close in frequency (radian frequency is w above.) This will give you an EXCELLENT idea of what IMD is all about if you fiddle with it a little.)

Once you have the appropriate expression for the terms of interest plug in some real values and see what you get. It should be fairly close if you get it right. (And I suggest FETs for the mixers. They have fairly close to square law input voltage to output current curves. Hence they tend to have better IMD (and hence crossmod) performance than bipolars.) And once you can get fairly close in predicting mixer performance you will be in a world few mortals ever seem to live. <^_-> (These days at least "mortals" can play with Spice and see results. But if they've never done the math they seldom have any idea WHY it works the way it does. Understand "why" and you can take the next step to predictable control. THAT pays BIG bucks back when I was doing it. --- They just kept trying to ship my finger with the product.....)

<^_^> Joanne Dow, Amiga Exchange Editor
jdow@bix.com

Date: 7 Jul 1994 16:46:38 GMT
From: ihnp4.ucsd.edu!usc!cs.utexas.edu!convex!news.onramp.net!news.sprintlink.net!
news.clark.net!fortado@network.ucsd.edu
Subject: GPC algorithm
To: ham-homebrew@ucsd.edu

Date: 7 Jul 94 16:12:07 EDT
From: ihnp4.ucsd.edu!usc!howland.reston.ans.net!wupost!news.miami.edu!umiami!

therbert@network.ucsd.edu
Subject: Looking for coax relay
To: ham-homebrew@ucsd.edu

This post is actually for my father, W6HJ, now
living near me in Miami,FL.

He has a couple of coaxial relays on a home built
transmitter - Used, of course to switch the antenna
when transmitting or receiving (1KW transmitter)

One of these relays is no longer working and
needs to be replaced.

Any suggestions for sources, new or used?

Thomas J. Herbert
University of Miami

therbert@umiami.ir.miami.edu
W6UGJ

Date: 7 Jul 1994 13:03:28 GMT
From: ihnp4.ucsd.edu!agate!howland.reston.ans.net!news.cac.psu.edu!
news.pop.psu.edu!psuvax1!news.ecn.bgu.edu!uxa.ecn.bgu.edu!uiaahmed@network.ucsd.edu
Subject: Low-Band RF Amplifier
To: ham-homebrew@ucsd.edu

Victor Tavernini (tavernin@sun1.interlan.com) wrote:
: A while ago I remember seeing a series of articles posted by a fellow who
: built a low-band RF amplifier using inexpensive transistors ...

: I'd appreciate a copy of these articles since I've misplaced mine!

: Thanks,

: Victor Tavernini
: Racal-Datacom, Inc.

: tavernin@sun1.interlan.com

I am also looking for one. Can somebody mail it me.

Thanks

Khan
N70LJ / AP2CW

Date: 7 Jul 1994 11:51:15 -0400
From: ihnp4.ucsd.edu!usc!howland.reston.ans.net!news.intercon.com!news1.digex.net!
digex.net!not-for-mail@network.ucsd.edu
Subject: need schematic/source for KENWD IF-10B
To: ham-homebrew@ucsd.edu

Greetings,

I am looking for the schematic for Kenwood's IF-10B (not -C, -D, or other), and have called Kenwood, their parts supplier, and virtually all the relevant advertisers in QST without any luck. It is a tiny board that fits in the "control board (??) / processor" compartment of a TS-940 and is used for external (computer) control of the rig.

IF-10B is a discontinued accessory, and I'm thinking of kludging one together.

If anyone knows a source, or is willing to mail me a xerox copy, please drop me some email.

I will gladly reimburse your copying/handling/shipping costs...

Regards;

//Siamack
73 de wj1q

==
Siamack Navabpour sia@access.digex.net

"Who he bends to himself a joy, will the winged life destroy,
But he who kisses the joy as it flies, will live in eternity's sunrise"
-- Willy Shakespeare

Date: 7 Jul 1994 16:22:31 GMT
From: ihnp4.ucsd.edu!swrinde!gatech!newsxfer.itd.umich.edu!zip.eecs.umich.edu!
umn.edu!newsdist.tc.umn.edu!dawn.mmm.com!tcdsp1!tahir@network.ucsd.edu
Subject: Old Parts
To: ham-homebrew@ucsd.edu

I am looking for the following parts:

Lamp GE1819
transistor 2N5490
Voltage Regulator (12v) 7812 (NC7812C or NC7812K)

Please email directly. Thanks for any help.

--

* The opinions expressed are mine and do not reflect the views of*
* Twinix Systems Inc. or 3M. *

Date: 7 Jul 1994 01:56:04 -0400
From: ihnp4.ucsd.edu!swrinde!emory!europa.eng.gtefsd.com!newsxfer.itd.umich.edu!
ncar!csn!jabba.cybernetics.net!not-for-mail@network.ucsd.edu
Subject: RF Feedback in Mic while talking and touching mic.
To: ham-homebrew@ucsd.edu

In article <2vdlfq\$lnj@news.tamu.edu>,
Chris Schmidt <cschmidt@diralect.me.pvamu.edu> wrote:

> I have a problem with RF feedback in my mic only when I touch
>the mic to my face while speaking. It seems that it is making the
>Radio Squeal. I have a RCI 2950 with a Texas Star DX 667V amplifier'
^^

Am I behind the times? I've never heard of this HAM equipment?

>and a cheap Mag-mount base with a base loaded antenna with about
>a 3.5" whip on top. I do not have this problem when not using
>the amplifier. On AM it squeals when I talk. On SSB it is fine until
^^^^^^^^^^ ^^^^^^^^

There's the occasional ham who switches between SSB and AM, but...

>I start talking and then it Stays keyed up and squeals for a few seconds then
>stops. I have had this problem with other Equipment too. But not this
>bad.

>

>.....

>73,

>

>chris <=== callsign???

>Houston tx.

>

Are we being asked to give advice on a KW amp for the Citizens Band?

Just curious, Chris?

Before I answer your question, would you tell me the frequency band you are operating, since it makes a difference in understanding your equipment and antenna setup here.?

73 Steve AB4EL ab4el@Cybernetics.NET

Date: 8 Jul 1994 07:40:47 GMT
From: ihnp4.ucsd.edu!agate!howland.reston.ans.net!EU.net!Germany.EU.net!
Munich.Germany.EU.net!thoth.mch.sni.de!news.sni.de!nanette!norton!
schro@network.ucsd.edu
Subject: Satellite fax to HF fax converter
To: ham-homebrew@ucsd.edu

In <1994Jul6.170618.1515@gov.nt.ca> ve8ev@gov.nt.ca (John Boudreau) writes:

>Has anyone ever built a converter to change the AM wefax from NOAA
>satellites to FM wefax for reception with an HF fax demodulator?
[stuff deleted]

There was a circuit for an AM/FM converter in the german packet mailboxes for reception of satellite pictures. It was used as a frontend to the HamComm interface and JVFAX. The design is based on an XR2206. If there is interest, i'll try to dig it up. Be warned, the circuit description and alignment procedure is written in german.

73 Django
DL5YEC

Date: 8 Jul 1994 09:45:53 GMT
From: ihnp4.ucsd.edu!agate!howland.reston.ans.net!EU.net!Germany.EU.net!
Munich.Germany.EU.net!thoth.mch.sni.de!news.sni.de!nanette!norton!
schro@network.ucsd.edu
Subject: Satellite fax to HF fax converter
To: ham-homebrew@ucsd.edu

In <1994Jul6.170618.1515@gov.nt.ca> ve8ev@gov.nt.ca (John Boudreau) writes:

>Has anyone ever built a converter to change the AM wefax from NOAA
>satellites to FM wefax for reception with an HF fax demodulator?
[stuff deleted]

There was a circuit for an AM/FM converter in the german packet
mailboxes for reception of satellite pictures. It was used as a
frontend to the HamComm interface and JVFAX. The design is based on an
XR2206. If there is interest, i'll try to dig it up. Be warned, the
circuit description and alignment procedure is written in german.

73 Django
DL5YEC

Date: Fri, 8 Jul 1994 04:07:54 GMT
From: ihnp4.ucsd.edu!library.ucla.edu!europa.eng.gtefsd.com!
newsxfer.itd.umich.edu!zip.eecs.umich.edu!umn.edu!news@network.ucsd.edu
Subject: Tempo 2002 - HELP!
To: ham-homebrew@ucsd.edu

Help!

I recently purchased a used Tempo (Henry) 2002 2 meter kilowatt amplifier.
(Uses a pair of 8874 tubes in push-pull)

The amp was custom built by Henry to operate on 194 MHz, and was used in an
MRI lab. I'd like to move the amp back down to 144 MHz.

I have the only technical manual available, which covers the 2002, 2006,
and 6N2. It has a schematic diagram of the amp, but does not provide the
dimensions of the tank coil, (a "U" shaped section of 7/8" tubing)
or any pictorial of the input circuitry.

Does anyone out there have a Tempo 2002, or have experience
servicing one?

Thanks;

Dave Quick WD0EKL

Reply to quick007@maroon.tc.umn.edu
Packet Radio: WD0EKL@WB0GDB.#STP.MN.USA
CompuServe 75526,2656

"My hovercraft is full of eels!"

- John Cleese

Date: Thu, 07 Jul 94 08:53:07 CDT
From: netcomsv!valinor.mythical.com!valinor!zogg@decwrl.dec.com
Subject: Vacuum Tubes
To: ham-homebrew@ucsd.edu

I've recently acquired several *THOUSAND* old vacuum tubes. I don't have time to post a list of all the type I have available, but I have a great deal of pre-1950 stuff which may be of interest to antique radio restorers. Tubes such as: Arcturus Blue (a cobalt blue envelope - one of the first triodes..), Audion, DeForest, Westinghouse, etc. I also have a great deal of Mil-Spec tubes with metal envelopes. IF anyone is interested in these components, please reply here.

I also have a complete set of Radio Repair manuals from 1926-1955. I have virtually all photofacts available at that time. I'm building a 100W tube amp for my bass guitar and would love to swap ideas with someone (is this the correct forum?).

- Jean Bulot
- gt0280a@acme.gatech.edu
- zogg@valinor.mythical.com

Jean Bulot
Internet: zogg@valinor.mythical.com uucp: netcomsv!valinor!zogg

Date: Thu, 7 Jul 1994 16:19:47 GMT
From: ihnp4.ucsd.edu!usc!nic-nac.CSU.net!charnel.ecst.csuchico.edu!olivea!news.bu.edu!gw1!nntp!not-for-mail@network.ucsd.edu
Subject: Voice IDer
To: ham-homebrew@ucsd.edu

I have built a voice ID unit for use in a hidden transmitter.
I used the hallmark card.
I had no trouble coupling the output from the card in my Kenwood TH78A HT.

A 555 timer causes the unit to ID every 30 sec to 5 min (depending on trim pot value), and also dekeys the HT to reset its timer.

The project works great.

Joe Wilkes

Date: Thu, 7 Jul 1994 16:02:57
From: pa.dec.com!ntguru.zso.dec.com!mcleman@decwrl.dec.com
To: ham-homebrew@ucsd.edu

References <acarhartCs81MH.2nv@netcom.com>, <acarhartCs9vFq.Joz@netcom.com>,
<2vg73i\$h0i@linda.teleport.com>
Subject : Re: AM Transmitter

If you look at the aftermarket CD players (changers) that mount in the trunk,
they use an FM xmitter to get the CD sound through the stereo.

End of Ham-Homebrew Digest V94 #186
